

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-83 (Cancelled)

84. (Currently amended) A system for fixation of a sample comprising:
a reaction chamber;
an ultrasound transducer disposed ~~operatively~~ movably on said reaction chamber; and
a central processing unit controlling a frequency of ultrasound emitted by said ultrasound transducer;

wherein said ultrasound ~~from said ultrasound transducer~~ is applied to a sample in said reaction chamber during a fixation process.

85. (Original) The system of claim 84 comprising more than one transducer.

86. (Original) The system of claim 84 further comprising one or more sensors.

87. (Original) The system of claim 84 further comprising means for heating or cooling said reaction chamber.

88. (Original) The system of claim 84 further comprising a pump.

89. (Original) The system of claim 84 further comprising a distributor.

90. (Previously presented) The system of claim 84 wherein said sample is a tissue sample, a membrane, a membrane filter, a tissue sample mounted on a slide, a nucleic acid chip, a microarray of nucleic acid, a microarray of tissue, or an immuno chip.

91. (Original) The system of claim 84 further comprising means for sampling reaction fluid.

92. (New) The system of claim 84, wherein said ultrasound transducer is disposed within about 2 inches of said sample.

93. (New) The system of claim 92, wherein said ultrasound transducer is disposed within about 1 inch of said sample.